

CLAIMS

- 1) Apparatus for controlling the childbirth labour comprising:
  - an electromyographic unit (4) with sensors (3) associated therewith for detecting the electrical signals of a parturient's uterus and means (6) for analysing and processing said electrical signals, and
  - a pneumatic belt (1) to be fixed around the parturient's abdomen and having sensors (15) associated therewith to detect the variation of the internal pressure due to uterine contractions, and means (2) for inflating said belt to provide a thrust as an aid for the expulsion of the fetus, characterized in that a device (7) is provided associated with said sensors (15) and (3) to control the activation of said means (2) for the inflation of the pneumatic belt (1).
- 2) Apparatus according to claim 1, characterized in that the said device (7) comprises an AND gate (70) with its inputs being connected, respectively, to the output of said electromyographic unit (4) and to the output of an A/D converter (150) located downstream of said sensors (15) which are housed in the belt (1), and with its output being connected with the input of a D/A converter (72) whose output is connected with said means (2) for the inflation of the belt (1).
- 25 3) Apparatus according to claim 2, characterized in that a first switch (71) is inserted on the line connecting the gate (70) with the converter (72).
- 4) Apparatus according to claims 2 and 3, characterized in that a second switch (73) is inserted on the line connecting the converter (150) with the converter (72), said second switch operating in push-pull mode with respect to said first switch.

5) Apparatus according to claim 1, characterized in that the said means (6) of the electromyographic unit (4) consist of a PC associated with the electromyographic unit (4).